D Scott Katzer

List of Publications by Year
in descending order

44	860	567281 15	477307 29
papers	citations	h-index	g-index

45	45	45	1039
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	GaN/NbN epitaxial semiconductor/superconductor heterostructures. Nature, 2018, 555, 183-189.	27.8	116
2	Epitaxial ScAlN grown by molecular beam epitaxy on GaN and SiC substrates. Applied Physics Letters, 2017, 110, .	3.3	87
3	Epitaxial bulk acoustic wave resonators as highly coherent multi-phonon sources for quantum acoustodynamics. Nature Communications, 2020, 11, 2314.	12.8	62
4	<inline-formula> <tex-math notation="TeX">${m SiN}_{x}$ </tex-math></inline-formula>/InAlN/AlN/GaN MIS-HEMTs With 10.8 <inline-formula> <tex-math notation="TeX">${m THz}cdot{m V}$ </tex-math></inline-formula> Johnson Figure of Merit. IEEE Electron Device Letters, 2014, 35, 527-529.	3.9	60
5	Atomic layer deposited Ta2O5 gate insulation for enhancing breakdown voltage of AlN/GaN high electron mobility transistors. Applied Physics Letters, 2011, 98, 023506.	3.3	44
6	Epitaxial Lift-Off and Transfer of III-N Materials and Devices from SiC Substrates. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 384-389.	1.7	41
7	Epitaxial metallic Î²-Nb₂N films grown by MBE on hexagonal SiC substrates. Applied Physics Express, 2015, 8, 085501.	2.4	38
8	Control of phase purity in high scandium fraction heteroepitaxial ScAlN grown by molecular beam epitaxy. Applied Physics Express, 2020, 13, 065509.	2.4	35
9	Heteroepitaxial growth of Î²-Ga2O3 films on SiC via molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	33
10	AlN/GaN HEMTs with highâ€ºÎº ALD HfO₂ or Ta₂O₅ gate insulation. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2420-2423.	0.8	30
11	Surface preparation of freestanding GaN substrates for homoepitaxial GaN growth by rf-plasma MBE. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	24
12	Band Alignment of Sc_xAl_{1â€“x}N/GaN Heterojunctions. ACS Applied Materials & Interfaces, 2020, 12, 52192-52200.	8.0	22
13	Nâ€polar n⁺ GaN cap development for low ohmic contact resistance to inverted HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 894-897.	0.8	20
14	Comparison of optical pyrometry and infrared transmission measurements on indium-free mounted substrates during molecular-beam epitaxial growth. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1993, 11, 1003.	1.6	17
15	Characterization of molecular beam epitaxy grown Î²-Nb₂N films and AlN/Î²-Nb₂N heterojunctions on 6H-SiC substrates. Applied Physics Express, 2016, 9, 021003.	2.4	16
16	Molecular Beam Epitaxy of Transition Metal Nitrides for Superconducting Device Applications. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900675.	1.8	16
17	HfO₂â€insulated gate Nâ€polar GaN HEMTs with high breakdown voltage. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1630-1633.	1.8	15
18	Oxygen incorporation in homoepitaxial N-polar GaN grown by radio frequency-plasma assisted molecular beam epitaxy: Mitigation and modeling. Journal of Applied Physics, 2012, 112, .	2.5	15

#	Article	IF	Citations
19	Homoepitaxial N-polar GaN layers and HEMT structures grown by rf-plasma assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B113.	1.2	15
20	Engineering Efficient Acoustic Power Transfer in HBARs and Other Composite Resonators. Journal of Microelectromechanical Systems, 2020, 29, 1014-1019.	2.5	14
21	Silicon nitride thin films deposited using electron-beam evaporation in an RF plasma MBE system. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	1.2	13
22	Charge control in N-polar InAlN high-electron-mobility transistors grown by plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	1.2	13
23	Ultra-high vacuum deposition and characterization of silicon nitride thin films. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B129.	1.2	12
24	An all-epitaxial nitride heterostructure with concurrent quantum Hall effect and superconductivity. Science Advances, 2021, 7, .	10.3	12
25	AlN/GaN/AlN resonant tunneling diodes grown by rf-plasma assisted molecular beam epitaxy on freestanding GaN. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	11
26	Temperature evolution of frequency and anharmonic phonon loss for multi-mode epitaxial HBARs. Applied Physics Letters, 2020, 117, .	3.3	9
27	Passive High Power RF Comb Filters Using Epitaxial GaN/NbN/SiC HBARs. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3406-3414.	3.0	9
28	Polarization-mediated Debye-screening of surface potential fluctuations in dual-channel AlN/GaN high electron mobility transistors. Journal of Applied Physics, 2016, 120, .	2.5	8
29	Suppression of surface-originated gate lag by a dual-channel AlN/GaN high electron mobility transistor architecture. Applied Physics Letters, 2016, 109, .	3.3	8
30	Effect of Alâˆ•N flux ratio during nucleation layer growth on the microstructure of GaN films grown by molecular-beam epitaxy. Applied Physics Letters, 2006, 88, 011916.	3.3	6
31	XeF2 etching of epitaxial Nb2N for lift-off or micromachining of III-N materials and devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	6
32	RF-plasma MBE growth of epitaxial metallic TaNx transition metal nitride films on SiC. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, .	1.2	5
33	Thermally reflowed ZEP 520A for gate length reduction and profile rounding in T-gate fabrication. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 051603.	1.2	4
34	Scandium Aluminum Nitride as an Emerging Material for High Power Transistors. , 2018, , .		4
35	Dependence of growth temperature on the electrical properties and microstructure of MBE-grown AlN/GaN resonant tunneling diodes on sapphire. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032214.	1.2	4
36	Phase Identification and Ordered Vacancy Imaging in Epitaxial Metallic Ta2N Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 12575-12580.	8.0	4

#	Article	IF	Citations
37	Electrical properties of high permittivity epitaxial SrCaTiO3 grown on AlGaN/GaN heterostructures. APL Materials, 2021, 9, 111101.	5.1	4
38	Growth-induced temperature changes during transition metal nitride epitaxy on transparent SiC substrates. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032204.	1.2	3
39	Epitaxial growth of SrCaTiO3 films on GaN by molecular beam epitaxy with a TiO2 buffer layer. Journal of Applied Physics, 2020, 127, 214104.	2.5	3
40	Plasma-assisted Molecular Beam Epitaxy of N-polar InAlN-barrier High-electron-mobility Transistors. Journal of Visualized Experiments, 2016, , .	0.3	1
41	Effect of GaN buffer thickness on the electrical properties of RF-MBE grown AlGaN/GaN HEMTs on free-standing GaN substrates. , 2009, , .		0
42	Self-aligned ALD AlO<inf>x</inf> T-gate footprint insulator for gate leakage current suppression in SiN<inf>x</inf> passivated AlGaN/GaN HEMTs. , 2009, , .		0
43	Phonon Diffraction Limited Performance of Fabry-PÃ©rot Cavities in Piezoelectric epi â€“ Hbars. , 2021, , .		0
44	Crystalline Phase Control in ScxAlx-1N Grown by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2021, 27, 2880-2881.	0.4	0